#### DOCUMENT RESUME

ED 456 079 SO 032 897

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TITLE Water: From Neglect to Respect. Water in Africa.

INSTITUTION Peace Corps, Washington, DC. Office of World Wise Schools.

SPONS AGENCY Department of Education, Washington, DC.

PUB DATE 2000-00-00

NOTE 51p.; For related Water in Africa units, see SO 032 890-910.

AVAILABLE FROM Peace Corps, World Wise Schools, 1111 20th Street, NW,

Washington, DC 20526. Tel: 800-424-8580, ext. 1450 (Toll Free); Fax: 202-692-1421; e-mail: wwsinfo@peacecorps.gov;

For full text:

http://www.peacecorps.gov/wws/water/africa/lessons/.

PUB TYPE Guides - Classroom - Teacher (052)

EDRS PRICE MF01/PC03 Plus Postage.

DESCRIPTORS Curriculum Enrichment; Foreign Countries; \*Geographic

Regions; Human Geography; Intermediate Grades; Junior High

Schools; \*Water; \*Water Resources

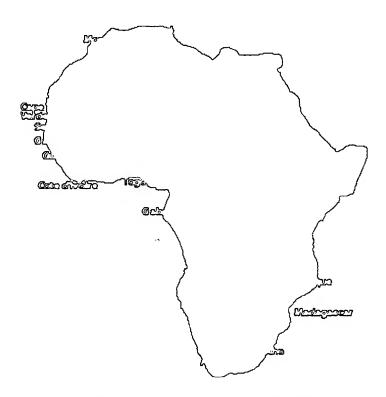
IDENTIFIERS \*Africa; \*Lesotho; Peace Corps; World Wise Schools

#### ABSTRACT

The Water in Africa Project was realized over a 2-year period by a team of Peace Corps volunteers, World Wise Schools (WWS) classroom teachers, and WWS staff members. As part of an expanded, detailed design, resources were collected from over 90 volunteers serving in African countries, photos and stories were prepared, and standards-based learning units were created for K-12 students. This unit, "Water: From Neglect to Respect," aims to make students in grades 5-8 more aware of the ways in which they are dependent upon water to maintain their standards of living. By comparing water use in Lesotho to water use in the United States, students realize that they may be taking for granted a substance which is considered precious in other parts of the world. Activities develop students' graphing, estimating, and writing skills. The unit suggests a timeframe, curricular areas, materials needed, standards, discussion questions, objectives, a detailed procedure, assessment information, and follow-up/enrichment activities. Attached are photos of Lesotho and stories from Lesotho about water and culture. (BT)



# Water: From Neglect to Respect



http://www.peacecorps.gov/wws/water/africa/lessons/

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Water in Africa is a project of Peace Corps World Wise Schools.

2000

Funded through a grant from the Department of Education, the Water in Africa project was realized over a two year period by a team of Peace Corps Volunteers, World Wise Schools' (WWS) classroom teachers, and WWS staff members. Inspired by an idea of one creative WWS teacher, the project eventually expanded into a detailed design. The development and implementation of the design included the collection of resources from over 90 Volunteers serving in African countries, the preparation of those photos and stories, and the creation of standards-based learning units for K-12 students.

### Water: From Neglect to Respect

#### **Description:**

The goal of this learning unit is to make students more aware of the ways in which they are dependent upon water to maintain their standard of living. By comparing water use in Lesotho to water use in the United States, students realize that they may be taking for granted a substance which is considered precious in other parts of the world. Graphing, estimating, and writing skills are all developed in "Water: From Neglect to Respect."

**Timeframe:** Four or five 45-minute class periods

Curricular Areas: Math, geography, language arts, visual arts

Grade Level: Grades 5-8

#### **Materials**

• Lesotho photos and narratives

- Student handout "Peace Corps Volunteers Report"
- Empty 2 liter containers
- Graph paper
- Colored pencils
- Rulers
- World map
- Map of Africa
- Display boards for student projects

#### Standards

Math Standard 3- Uses basic and advanced procedures while performing the processes of

computation

Benchmark-- Solves real-world problems involving number operations

Benchmark--Adds, subtracts, multiplies, and divides whole numbers and

decimals

Math Standard 6- Understands and applies basic and advanced concepts of statistics and data

analysis.

Benchmark-- Understands that data represent specific pieces of information about

real-world objects or activities

Benchmark-- Organizes and displays data in simple bar graphs, pie charts, and line

graphs.

Benchmark-- Reads and interprets simple bar graphs, pie charts, and line graphs

Geography Standard 15- Understands how physical systems affect human systems.

Benchmark-- Knows the ways in which human systems develop in response to conditions in the physical environment.

Language Arts Standard 1- Demonstrates competence in the general skills and strategies of the writing process.

Benchmark-- Uses strategies to draft and revise written work.

Visual Arts Standard 1- Understands and applies media, techniques, and processes related to the visual arts

Benchmark-- Understands what makes different art media, techniques, and processes effective (or ineffective) in communicating various ideas

Benchmark-- Knows how the qualities and characteristics of art media, techniques, and processes can be used to enhance communication of experiences and ideas.

#### **Essential Questions**

How do we depend on water?

What is the value of water?

How does differing access to water impact quality of life?

#### **Objectives**

#### Students will:

- Graph water consumption rates of Peace Corps volunteers and their own water consumption rate.
- Describe the many uses of water in their own community including domestic, agricultural, and commercial.
- Recognize that lack of access to water impinges on many aspects of living standards.
- Create triptychs showing what they have learned in this unit using math, visual arts, and drawing skills.

#### **Procedure**

#### Procedure Day One

- 1. Show students the photo LE0706. Have them play "twenty questions" until they determine what is being locked up in the photograph. Ask students to brainstorm why people may choose to lock up their water source. After several responses, read the photo's description and point out Lesotho on a world map.
- 2. Show several photos that indicate the time and effort put into water collection in Lesotho (e.g. LE0403, LE0309, LE0711). Explain that they will be reading accounts about daily water usage written by Peace Corps volunteers in Lesotho. (If needed, use the Peace Corps Web site at www.peacecorps.gov to explain the mission of the Peace Corps.)
- 3. Divide students into five groups. Have students read the online reports by the following Peace Corps Volunteers in Lesotho: Claire Hilger, Peter Yurich, Cynthia Holahan, Becki Krieg, and Jean Marie Mitchell. Alternatively, distribute the student handout "Peace Corps Volunteers Report"
  - Each group will read a different volunteer's account about water sources and daily usage to find out where they get their water and how much water is used on a daily basis. Depending on the size of the group, one student may be asked to read aloud while the others follow along silently. Some groups will need to do some simple division to figure the daily usage rate. Each group should report out to the class the Volunteer's water source and how much water the Volunteer reports using on a daily basis.
- 4. As students report their findings, illustrate the water amounts described by the Volunteers by using empty two liter soda bottles. Ask students to estimate their own daily water use in liters. Poll students to find their responses and record the answers on the board. Ask students to keep track of how many times they turn on a faucet between the end of class today and the beginning of class tomorrow.

#### Procedure Day Two

- 1. Ask students how many times they turned on a faucet since the last class period and record their answers. Discuss the difference in time and effort required for obtaining water in Lesotho to getting water in the United States.
- 2. Show students a large piece of butcher paper or a section on the blackboard where they can write any use of water they can think of in their home or their community. They can do this writing while waiting for a computer, while waiting for other students to finish calculations, and/or while waiting for other groups to finish completing a graph.
- 3. Tell students that they will be using data supplied by the United States Geological Survey (USGS) to figure out their daily water use. If possible, have students take turns visiting the USGS Water Science for Schools site at http://ga.water.usgs.gov/edu/sq3.html to

- calculate their water use. If computers are unavailable and/or if you would like your students to practice addition and multiplication, use the data provided by that web site for your students to calculate their own water usage.
- 4. Students will need to calculate their water usage in liters by multiplying the amount of gallons they use by 3.8. Students should gather in the same groups they were in for the previous lesson. Distribute rulers, graph paper, and colored pencils. They will work as a group to create a graph depicting their water usage compared to that of the Peace Corps Volunteer. The groups should also calculate average use for the group members and put that number on their graphs.
- 5. Completed graphs should be posted in the front of the room. Discuss the vast discrepancy in water use between the Volunteer and the students that is likely to be illustrated.

#### **Procedure Day Three**

- 1. Refer to student-generated list of water usage. Students are likely to have included mostly household uses of water. Discuss the recreational, industrial and agricultural uses of water. You may want to point out that nationwide, much more water is used for agriculture and industry than for domestic consumption.
- 2. Have students visit the United States Geological Survey web site at http://water.usgs.gov/watuse/pdf1995/html/index.html to find information about industrial and agricultural water use in the United States as a whole and about their own state. Compare that information to the agricultural and industrial data provided by the World Resources Institute at http://www.wri.org/facts/data-tables-freshwater.html or Lesotho. Ask the students to respond to the second essential question, What is the value of water? Discuss the value of water in terms of its domestic, industrial, and agricultural usage in your own state and in Lesotho.
- 3. Ask students how they think the lack of ready access to running water would make life very different in Lesotho than in the United States. As students respond, elicit responses such as the following:
  - People in Lesotho may not be able to wash their clothes as often as we do.
  - People in Lesotho may not be able to bathe themselves as often as we do.
  - It is more difficult to start industries in Lesotho.
  - It is more difficult to irrigate crops in Lesotho. They are dependent on the rain for virtually all of their farming. It is more difficult to have a vegetable or flower garden. People may not have as much time for studying, recreating, or any other type of activity because so much time is devoted to water collection.
- 4. For homework, ask the students to write down how much they value water after learning about the difficulties with water in Lesotho.

#### **Procedure Day Four**

- 1. Ask students to volunteer to read their homework assignments about how much they value water. Discuss what they have learned about water.
- 2. Tell the students that as a culminating activity, they will create a triptych about what they have learned in this unit. Tell them that a triptych is a three paneled display. One panel should show a graph comparing their own water use to the water use of the volunteer in Lesotho about whom they read. This panel might also contain information about water usage for domestic, agricultural and industrial use in Lesotho and in their own state or community (if that information is available). Another panel will show an illustration of how water is typically obtained in Lesotho and how water is obtained in households in the United States. It should answer the question "How does differing access to water impact the quality of life?" The third panel should be a written reflection of what they perceive to be the value of water. It should include mention of what they have learned, and if their value of water has changed as a result of this unit.

#### Assessment

- 1. Student work should be displayed on cardboard display boards. Invite other classes, parents, and/or water company officials to come view the displays and have students prepare themselves to explain and discuss their displays and about what they have learned.
- 2. Use the Water: From Neglect to Respect rubric to evaluate student understanding as shown through their triptychs.

#### Follow-up/Enrichment Activities

Visit the local water treatment plant or invite a representative to your classroom.

Have students survey local industries and/or agricultural enterprises to find out how water is put to economic use.

Research effective water conservation techniques and make posters or pamphlets for school or community distribution.

Use the data generated in this unit to practice other math skills. For example, have students calculate a group or class average of water use per day.

#### Additional Resources

None

#### About the Author

Amy Cohen is a social studies teacher at Abington Junior High School in the suburbs of Philadelphia. She reflected on the unit she created and tested:

I piloted "Water: From Neglect to Respect" with an ESOL class, a very bright and eager group with roots in many different countries. Working with the photos was wonderful. I started the lesson with the photo of a locked well in Lesotho and had them guess what was being locked up. Several photos of women collecting, hauling, and waiting for water followed this. The students were very interested in where the photos came from--they wanted to know how I had access to them, so it was fun to tell them about the Water in Africa project. One of the boys noticed that women were doing all the hard work, which he found quite objectionable. It was interesting for me to develop and implement an interdisciplinary lesson in which my weakest area, math, became a focal point. I was dismayed by the students' weak math skills, but glad to give them an opportunity to practice using math in an applied way. By the end of the unit I could tell that the students did indeed start thinking differently about water and appreciating their own easy access to running water--which was the point of the unit. (March, 2000)

## **Lesotho Photographs**



LE0104 Cow dung and soil were mixed with water to form a smear that was dabbed on both the inside and outside of the walls of this rondavel. The container used to carry the water to the site lies in the foreground.

by Peter Yurich Ha Ntlale, Lesotho (1999)



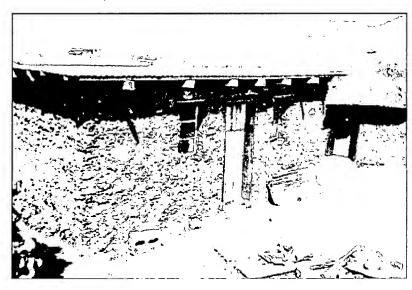
LE0113 This spring box is in the Village Chief's compound, some distance from my rondavel. People share the water from this tap with the chickens and other animals.

by Peter Yurich Ha Ntlale, Lesotho (1999)



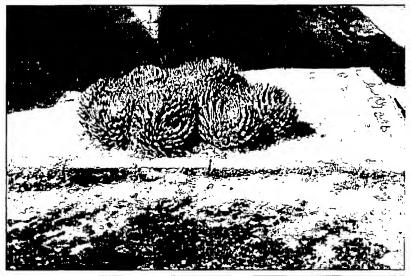
LE0116 I'm dipping water for my daily use, which I try to limit to one and a half liters for bathing, cooking, and cleaning. You can see my week's supply of water in the buckets.

by Peter Yurich , Ha Ntlale, Lesotho (1999)



LE0117 This building was built by one man between May and July 1999. Measuring 14 by 18 feet with 10 inch walls, it was constructed of stone, water and soil.

by Peter Yurich Ha Ntlale, Lesotho (1999)



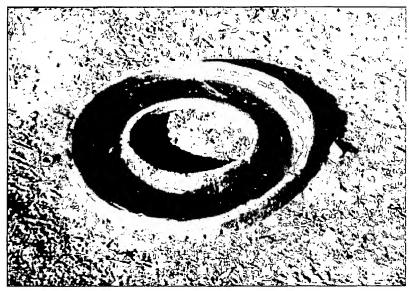
LE0120 Spiro Aleo, a plant that does not require much water, adds color to the grounds of St.Benedict's Mission.

by Peter Yurich Ha Khayentsi, Lesotho (1999)



LE0126 Although there is snow on the mountains, the winter months were over when this picture was taken on September 11, 1999. We had no snow between June and August and our water was very low. This unusual snow was very welcome.

by Peter Yurich Ha Khayentsi, Lesotho (1999)

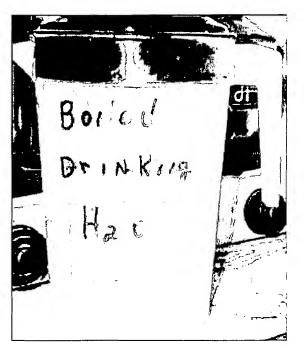


LE0222 Half a rubber tire was used to make a water hole for the chickens. Ducks also play and drink in water holes likethese.

by MaryAnn Camp Ha Rantuba, Lesotho (1999)



LE0225 Andreas Madlabe Mpdti is drinking fresh well water on a visit to my house. by MaryAnn Camp,Ha Rantuba, Lesotho (1999)



LE0226 My host family delivers to me about 20 liters of water every other day. Although the water usually looks clear, sometimes there is debris. I boil all of my drinking water for three for three minutes. (1999)



LE0230 Mankuhali, age 67, is fixing porridge for our school lunch. After lunch the children wash their own dishes at the pump.

by MaryAnn Camp Ha Rantuba, Lesotho (1999)

LE0231 Ma Maroesi, age 57, is washing clothes. The women and children begin very early in the morning getting water for bathing and cooking. Most of the time it is carried on the heads of the women, while the children bring wheelbarrows to carry the 20 liter plastic jugs.

by MaryAnn Camp Ha Rantuba, Lesotho (1999)





LE0234 Mé Julie, age 29, is watering seedlings. Beet root and carrots are planted together and watered in the morning and evening. Most serious gardeners have water catchment barrels. A lot of gardeners and farmers dig pits to collect water when it rains. In 15 months I have marked my calendar with 10 days of rain, so I have never seen the pits full, but I have seen the barrels full.

by MaryAnn Camp Ha Rantuba, Lesotho (1999)



LE0237 Moohko, age 6, is getting a bath. Her mother is wearing the typical Basotho dress with Kabo and straw hat.

by MaryAnn Camp Ha Rantuba, Lesotho (1999)



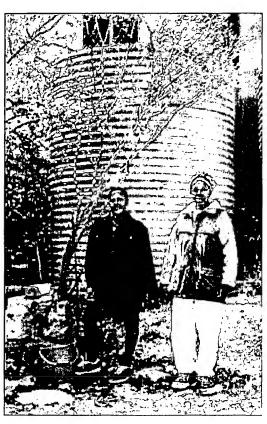
LE0301 Sister Mary Louisa and Sister Mary David are sisters of the Sacred Heart who run the local clinic at Christ the King Mission. They are standing in front of a solar powered water heater used for the clinic patients. The Mother Superior of the convent controls the water supply that is pumped from the spring by a generator and flows through pipes to the mission.

by Claire Hilger Christ the King Mission Qacha's Nek, Lesotho (1999)



LE0303 The temperature has dropped well below zero and there are strong winds, so the girls of the village are bundled up waiting for their turn to dip water. In the cold weather most people wear the traditional Basotho blanket. We had no snow this year, so there is very little water. The water comes from the pipe in a trickle, so this will take a long time.

by Claire Hilger Christ the King Mission Qacha's Nek, Lesotho (1999)



#### LE0307

Rain filled these tanks last night with enough water to last a few days. Some believe this was the result of a game, the 'lesokoana', a kind of rain prayer, played by the village girls the previous Sunday.

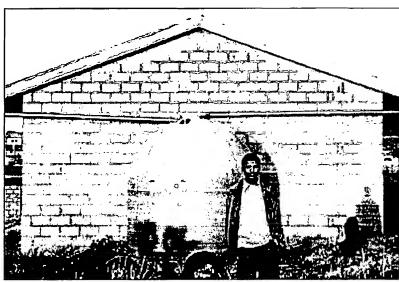
by Claire Hilger Christ the King Mission Qacha's Nek, Lesotho (1999)



#### LE0309

Students at Pope John XXIII School on Christ the King Mission walk the half-kilometer home every day with their books and their water for the next day. Students are always excited to see the camera, but many have run away. They don't like photos that show their struggling.

by Claire Hilger Christ the King Mission Qacha's Nek, Lesotho (1999)



LE0312
This tank is supposed to collect water, but without rain or snow for several months, it is empty. Nala Mazwe is a teacher at Pope John XXIII School on Christ the King

by Claire Hilger Christ the King Mission Qacha's Nek, Lesotho (1999)



#### LE0314

This is the hot water tank for the sisters of the Sacred Heart who run the local clinic at Christ the King Mission. Heat from the coal stove goes up the chimney to heat their water. Ntate Montsi checks the tank.

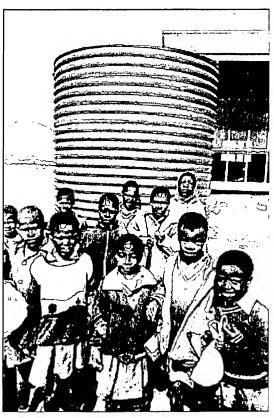
Mission.

by Claire Hilger Christ the King Mission Qacha's Nek, Lesotho (1999)



LE0401
The children of Ha Sekhohola
Primary School gather around
the 'citibeng' or bore hole to
fetch water between classes.

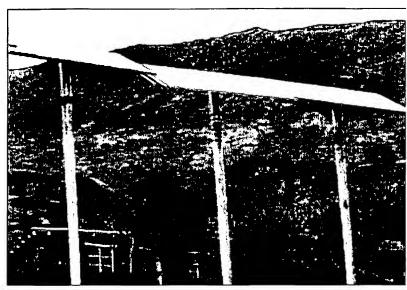
by Cynthia Holahan Ha Nkokana, Thaba-Tseka District, Lesotho (1999)



#### LE0403

The children are standing in front of the water tank that collects rainwater for the Ha Sekhohola Primary School. It remains empty for most of the year.

by Cynthia Holahan Ha Nkokana, Thaba-Tseka District, Lesotho (1999)



#### LE0501

These solar panels contrast with the traditional village houses of Sekake, Lesotho. They were provided by foreign aid money, and generate power to run the pumps that bring water to this village.

by Becki Krieg Qacha's Nek, Lesotho (1999)



#### LE0502

Because of solar panels that provide power to pump water to Holy Rosary Primary School, the school has water when all others do not during times of drought. This schoolgirl is drawing water to prepare the school's lunch.

by Becki Krieg Lesotho (1999)



#### LE0504

In the village of Ha Mamosa a field worker opens the irrigation tap to start the flow of water to the cabbage field. Most areas do not have a way to irrigate and must depend on the natural rain. The size of the field is very small compared to the need for irrigated fields.

by Becki Krieg Lesotho (1999)



A young girl scoops one liter of water at a time to fill a bucket. This will be all the water her family has for the day. Many buckets are lined up as their owners wait their turns to draw water and fill them.

by Becki Krieg Lesotho (1999)



#### LE0702

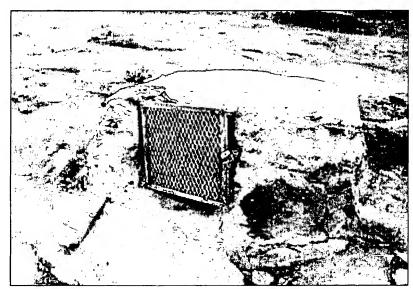
Students of Makoanyane Primary School are washing their plates before lunch. This is the only kind of 'play' that students have with water.

by JeanMarie Mitchell Ha Tebelo, Lesotho (1999)



LE0705
A woman is pushing a wheelbarrow filled with plastic jugs of water. This is very hard work because the water is so heavy.

by JeanMarie Mitchell Ha Tebelo, Lesotho (1999)



LE0706
This phot was taken at 4:00
p.m. The well is locked in
HA Tevelo at night and will
not open again until 6:00 a.m.

by JeanMarie Mitchell Ha Tebelo, Lesotho (1999)



LE0707 A girl is sitting on top of the well waiting for water. The buckets are inside the well. There is no water yet.

by JeanMarie Mitchell Ha Tebelo, Lesotho (1999)

LE0711

These women walked down a mountain to get water from a stream, and now, with the water in the buckets on their heads, they have to go back up to get to their homes!

by JeanMarie Mitchell Ha Tebelo, Lesotho (1999)



### **Stories from Lesotho**

### Water and Culture

#### by MaryAnn Camp, Ha Rantubu, Lesotho

Having lived in Hu Rantubu, Lesotho, now 15 months, I have learned several cultural rituals connected with water. As in a lot of cultures, the religious ceremony of Baptism is one. I have seen water sprinkled over a baby's head. Another religious observance is during the "phu phu" (funeral)—water is sprinkled on the casket with a small branch (representing an olive branch). The water has been blessed by the clergy and, therefore, becomes holy water. After the sprinkling of the water on the casket, the remaining is poured over the casket at the gravesite before lowering the casket.

Another ritual where water is used is if a witch doctor has put a curse on you or your family and you want to break the curse. One fills a clay pot with water and takes it to a place of water, i.e., a pond, creek, or river. The pot is laid near the water and with a stick, a swift blow is delivered to the vessel releasing the contents into the nearby water source. This is supposed to break the spell or curse.

#### by Claire Hilger, Christ the King Mission, Qacha's Nek, Lesotho

Lesotho is a very dry country, so water is revered. Rain and snow are greeted by dancing and singing. We had no snow this year, and it is very dry. People are not planting and are worried that there will be no harvest this year. To alleviate the problem, one of the nuns from the mission asked some students to play the 'lesokoana' game. (A lesokoana is the thick stick used to stir the 'papa,' a thick porridge of maize meal that is eaten at every meal with vegetables and/or meat.) Each family has its own lesokoana, which is cut from the branch of a tree; the bark is removed and the stick becomes smooth with use. A few of my students accompanied me to the edge of the cliff where we could watch the game.

One girl is chosen to go into a house in a neighboring village (about an hour's walk) and steal the lesokoana. Once she has it, the girls of that village chase her and try to get it back. If she does not get away, she has to go back and steal it again until she gets it.

After two tries, Pulane was able to throw the lesokoana ahead to Neo who ran until she passed it to Lerato, waiting up ahead. Using this relay method the girls were able to bring the stick safely to us at the top of the plateau. By this time it was dusk, but the girls went back for another stick. I went to get dinner. A few hours later they ran through the mission triumphantly carrying the two sticks in front singing rain songs. They then made a ceremony at the chief's house just

outside the mission. A few nights later I woke up to the sound of heavy winds and rain. The next morning there was a knock on my door. 'Do you see Ms. Claire, the lesokoana thing has worked!' How could I argue with such a proof?

#### by Cynthia Holahan, Ha Nkoka, Thaba-Tseka District, Lesotho

Every spring, just before the rain season begins the Basotho have a ritual game the young girls play--called 'lesokoana'. Lesokoanan is the stick used to stir papa (the staple food of the Basotho made from maize meal). The girls race from village to village passing along the Lesokoana they have taken from a neighboring village. If they take the Lesokoana unnoticed, they will yell to notify the women as she runs away. This game attracts the attention and cheers of everyone in the villages. The game ends when one group of girls successfully brings the Lesokoana to their village chief. As they enter the village with the Lesokoana they sing and dance in celebration of their victory. I am not clear how the game relates to the rain, but it seems to be one of those questions you just don't ask.

#### by Becki Krieg, Qacha's Nek, Lesotho

After an exhausting flight, my Peace Corps training group finally arrived in the country of Lesotho. We all looked out the window of our plane to steal the first glimpse: a breathtaking view of a sunset full of reds and oranges coloring the mountainous skyline. This was it. This was what we had been waiting for: The Mountain Kingdom of Lesotho.

As we exited the plane, a group of currently serving Volunteers greeted us with banners and cheers. But what stands out in my mind is their singing of the Lesotho national anthem, Pina ea Sechaba. The anthem ends with a chanting of the Lesotho motto, "Khotso, Pula, Nala." I decided those would be the first words I learned in the local language Sesotho.

As our Sesotho classes began, I had my chance to learn about "Khotso, Pula, Nala." The English translation is "Peace, Rain, Prosperity." I was surprised that rain would be a part of their motto. I had always thought of rain as being somewhat negative. I know we need rain, but I always thought of rain as something that made chilled my bones, darkened the sky, and ruined my plans for a day at the park or a ball game.

But the people of Lesotho view rain in an entirely different way. This country is very mountainous, rocky, and dry. The people do not have much money, so in these harsh conditions, they must grow enough food for their families to survive. The depend on water--to the extent that it is truly a national wish. The people of Lesotho ask for rain proudly, loudly, when they raise their voices to sing the national anthem, "Khosto, Pula, Nala!"

The people of my village of Hathamere, do not have ceremonies that are held to celebrate the value of water. However, they do have many songs and dances that small groups or individuals will frequently perform in relation to water. The people dance and sing when they need water and when they have just received it. Music is a vital part of their lives, so singing and dancing about something as important as rain and water is a natural response.

#### by JeanMarie Mitchell, Ha Tebelo, Lesotho

The Basotho people fear rivers and lakes. They believe snakes live there and are also afraid of them. They do not even know how to swim or fish. However, one time I heard a story of a woman who was born a 'sangoma' (witch or traditional doctor/healer) and she did not want to be one. She kept having dreams saying she must "go to the lake and get the cup of blood," in order to be free. But she feared the snake in the lake. So, she kept having sudden illnesses--i.e. losing her voice, joints hurting so bad she couldn't walk, rashes and once she could not use her feet! All because she refused to follow the way of life of a sangoma. (Apparently sangomas have dreams that tell them certain things to do). To this day she still refuses sangoma life. Yesterday I saw her and she was ill and could not speak! If only she did not fear "the snake in the lake," she could fetch her "cup of blood" and be free!

### The Source of your Water

#### by Peter Yurich, Ha Khayensti, Lesotho

My village, Ha Ntlale, gets its water from a tap that is fed from a spring box on the mountain. When there is no water at the tap, I must go to the next village or go to a water hole some distance away. I dip the water from the hole and carry it to my house. Often I find the cows, sheep, goats, or donkeys drinking at the water hole. Needless to say I boil all my water and always try to keep two buckets in reserve.

#### by MaryAnn Camp, Ha Rantubu, Lesotho

The source of my water is from a borehole. There are six wells in my village of over 1000 people. The women Boké and children begin very early in the morning getting water for bathing and cooking. Most of the time it is carried on the heads of the women. The children bring wheelbarrows. The containers are 20 liter plastic jugs.

My water is delivered by my family to my door, 20 liters every other day. Although the water usually looks clear, sometimes there is debris. I boil all of my drinking water for three minutes. My bathing and washing water I do not boil. The water tastes good without a chemical residue.

Water in Lesotho is always hard to come by. In my previous village site of Mofeteng, the wells were almost dry and I had to arrange to get two 50 liter drums of water from my camptown. This happened every two weeks when I'd go to the extension office for a meeting. The barrels were filled at the local water supply office with a rubber hose. This water always had a muddy residue on the bottom of the containers.

#### by Claire Hilger, Christ the King Mission, Qacha's Nek, Lesotho

My water is pumped from a spring by a generator on the mission and comes through pipes right to a regular sink in my house. The water quality is very good. I do not need to filter it or boil it. I have never run out of water, but my students often do. The taps and toilets in their hostel have been turned off as they were told they were wasting it. So, instead, they draw it from rain collection tanks. When this runs out they usually fetch from the nearby village spring. The villagers beat them away with sticks, though. After a while the sisters will usually see reason and allow one teacher to pump water for them to the school and they collect it there. All of the water on the mission usually runs out in a few months at exam time, just when the rainy season is due to begin. It doesn't look like the supply will hold out this year. Water is everywhere unevenly distributed in this country. If a village tries to go to another village where the water is more plentiful they will often be chased away.

#### by Cynthia Holahan, Ha Nkoka, Thaba-Tseka District, Lesotho

The water source in my village is a public tap, actually a series of taps located throughout the village. The system is fairly new, installed by Rural Water Supply in 1996. The system is a series of underground and over ground pipes that pump water from a spring near the top of one of the village's mountaintops. I have to say I am quite lucky compared to the other volunteers. Water has never been a problem. The tap nearest my house did dry out for a few days during the dry season, but villagers were able to collect water from another tap less than a kilometer away.

In general, the water system seems to be quite good. I have spoken to people of neighboring villages who have yet to install a water system and they are having many water troubles. Their sources are slow and unreliable bore holes that are dirty--used as drinking water by cows and goats. I consider myself a blessed Peace Corps Volunteer for having such a reliable water source.

#### by Becki Krieg, Qacha's Nek, Lesotho

Most drinking water comes from one of three sources: a tap or pump, a natural spring, or collected rainwater. Except for the rainwater, the water has to be transported from the source to the people's houses. This is not an easy task. Water is heavy and people must walk 1 -- 2 miles on rocky mountainous paths.

Many villages have a water source within a 30-minute walk. Taps are the best. Just turn the handle and water pours! The pumps take more effort. Some are long levers that look like one-sided teeter-totters. Children will bounce them up and down with their whole bodies. Some are two handles that need to be turned like the pedals on a bicycle. And still others need to be cranked in circles horizontally.

But even taps or pumps are no guarantee of water. Sometimes the water only flows for a few hours a day. Often early in the morning around 5:00 A.M. Villagers must wake up this early to get their buckets in line and wait for the water. Sometimes the taps dry completely and people must walk even further to another village or natural spring. (Remember how hard it is to carry water?)

Natural springs are good but people need to scoop the water into buckets, which can take a long time. Rainwater is collected from most metal roofs, but the traditional houses have thatched roofs. And the dry season can last a long time, which makes collecting rainwater ineffective during that time.

My water comes from all of these sources. I need to pay someone to collect my water from a tap or spring, whichever is available. I can't do it myself. It is too far to carry those heavy buckets and I haven't mastered carrying them on my head! If it rains, my host family will collect rainwater from their metal roof. My house is next to theirs, but my roof is thatch.

#### by Amy Bratsch, Ha Thamere-Qutin-Mt. Moorosi, Lesotho

The water in our area comes from the mountain rivers and streams. It is released for the villagers through water taps and is quite clear and clean. However, I do boil my drinking water because there is no method of purification.

About six months out of the year-during the dry season-water is only available every other day in the morning. Each household usually receives one bucket. Sometimes the village goes four days without water. During the rainy season the taps are open daily.

#### by JeanMarie Mitchell, Ha Tebelo, Lesotho

The water in my village comes from a borehole or 'cilibeng.' When it is the rainy season (December-February) there is plenty of water. The rest of the year, however, is pure drought. The well has water only at 6:00 AM and sometimes at 5:00 PM. The villagers have to travel to neighboring villages to get water. I boil water for visitors because people have gotten diarrhea from it, however it does not seem to effect me. There are also many taps in my village.

### **Daily Usage**

#### by Peter Yurich, Ha Khayensti, Lesotho

There isn't much water available because we had a very dry winter and no rain this spring. I usually try to use only one to one and a half liters of water a day. This includes bathing, cooking, and cleaning dishes. Once a week I wash clothes, but try to use as little water as possible.

My day starts by boiling two liters of water. I use less than one liter to bath, drink two cups of coffee and save the rest for cooking and cleaning dishes. If the tap is working I may indulge myself by using a little more for bathing.

My host family uses a little more than I do because there are more people in the family. They use a wheelbarrow to carry two 10-liter buckets of water. Right now they use more water because they are making dung smear for the floor and walls of a new building. The building was constructed from rock and held together with a mud mixture that dried and became hard.

#### by MaryAnn Camp, Ha Rantubu, Lesotho

I fill my coffee pot the night before with 2 1/2 cups of water to boil upon awakening. I also begin to heat water for my morning dishes and daily clothes washing (socks, underwear). I use one cup of water for coffee and use a small amount of water to wash the morning dishes--the remaining 11/2 cups of boiled water is used for rinsing the dishes. Then I combine the water in a basin or a pail for washing the towels or some laundry. If the floor needs washing, I then use the water to wash the floor. After washing the floor, the water is quite dirty, but fine to water inside plants or the outside herb garden.

My community washes blankets and sheets in a nearby river and spring. My host family does most of the cooking on an outside fire and there is always a pot of water heating for family uses.

My workplace, which is the local school, has a water pump that we use to get water for our cooking classes and for mixing paint for the school library we are building. We needed a great deal of water for mixing cement to make the library floor. Women brought 20 liter containers of water to pour in large drums for the cement mixing.

My use of water in the U.S. is as conservative as in Lesotho. I live on a rural piece of property with a well. My well invariably goes dry every summer. I use a sump pump from a stream to water my garden, thus not using well water. I had a septic tank replaced just before entering Peace Corps, which cost \$22,000, so I'm very aware of water and the cost of using it. Bathing in a basin in Lesotho has its advantages as well as at a pit latrine.

by Claire Hilger, Christ the King Mission, Qacha's Nek, Lesotho

I use a lot less water here than I did in the U.S. I bathe everyday and this usually amounts to 2-3 liters of water. I use water for cooking, washing and tea, but in much smaller amounts than before. Usually a liter or less of water can wash the whole day's dishes. I have a flush toilet, but usually use wash water to flush it and follow the creed--"if its yellow, let it mellow." Water is used for the same purpose in the community, but sometimes in smaller amounts as they have to fetch it on their heads.

#### by Cynthia Holahan, Ha Nkoka, Thaba-Tseka District, Lesotho

On average, I fill a twenty-liter bucket of water every two to three days for daily use. This varies, of course, according to how often I bathe and wash my hair (Sorry Mom!). In the evenings I boil about two liters for the next day's drinking. I began boiling after a long bout of giardiasis, and infection of the small intenstine. At first I found it tedious and "un-Peace Corps-like" to boil, but having a routine of boiling to get rid of giardia is actually not a problem at all. I bathe indoors using a basin. It's truly amazing how little water is actually required to bathe! I use roughly three liters to bathe and three to wash my hair. During the dry season, when the river is nothing more than a series of stagnant puddles, I also use tap water to wash my clothes, as do others in the village. The Basotho are very particular about washing themselves, their clothes, bedding and dishes on a daily basis so their dependence on the village water system, particularly during the dry season is great.

I don't even know how I can compare my use of water in Peace Corps to that in the United States. My life here depends on the availability of water, rain, and the weather in general as it never did growing up in a big city. I am so completely conscious now of how every drop is used, of how to use water more efficiently, and of the fact that I never known when or if water will not be available.

#### by Becki Krieg, Qacha's Nek, Lesotho

My water comes from various sources, and sometimes the water from these different sources gets mixed together. So to be safe, I boil all water I use for drinking, especially my favorite drink, Kool Aid sent from the States!

There is no running water at my house. I store water in two large buckets inside my house. I need to scoop the water out of the buckets to use for cooking, cleaning or bathing. But Lesotho can be very cold. It even snows in the wintertime. So I certainly don't want to pour that cold water over myself for bathing. That means taking the extra time to heat some water before taking a bath. A bath means a few inches of water in a bucket. I certainly can't cover my whole body in hot water. Winter baths are cold!

Because water is so difficult to get, I have learned to conserve and recycle water. I usually have only 60 liters of water for an entire week for all my needs. I can recycle water when washing

clothes. The water used to rinse one load of laundry is used to wash the next load (all washed by hand of course). I have also learned how to get clean by bathing in a bucket with only four liters of water. That's only two 2-liter Coke bottles of water for an entire bath!

#### by Amy Bratsch, Ha Thamere-Qutin-Mt.Moorosi, Lesotho

Right now we are having a very dry season. Every other day when the taps are expected to be turned on, I take my bucket to the tap at about 6:00 AM and put it in line. Your bucket's place in line is very important because the water is on for a limited time and water might run out before all the buckets are filled. A person living near the tap will open it and when she hear the water starting to flow she will begin to fill the buckets in order. Word that the water is running travels quickly The women and girls come for their buckets and carry them on their heads to their homes. In order to make sure my water will last, I use the same water to wash my hair, take a sponge bath, wash my underwear and clean the floor. Large laundry is taken to the river until it becomes too dry. I always set aside water for drinking and cooking. The school has its own water tap, but they too only get water every other day. On no water days a tub is set out for the students to rinse the eating containers they have brought from home. The school does cook the porridge.

#### by JeanMarie Mitchell, Ha Tebelo, Lesotho

My day begins with a knock at my door at dawn from a neighbor. She knocks to tell me to come to the well and fetch my water. Each night A'Me comes and takes my bucket to ensure I am the first to receive water.

I have never valued something as much as I value water now. Honestly, I never thought twice about the water I used or how much or where I came from. Now, only receiving 5 liters a day, I save every drop I can! I recycle dirty water for use in my garden and my family also uses rainwater catchments. People here wait all day to get water and travel long distances to fetch it. The Rural Water Supply (government water works) has been promising for over a year now that it will come to my village and deep-drill a borehole, but they still have not arrived. Will they ever? I only hope.

### **Managing Water**

#### by Peter Yurich, Ha Khayensti, Lesotho

The local tap has a committee that sees to the upkeep and water supply.

#### by MaryAnn Camp, Ha Rantubu, Lesotho

The community has a water supply committee. Recently five of the six wells were broken through carelessness and vandalism. The water committee went to the district water committee and it took three months to repair the wells. The women are the main caretakers of water used in the homes and the men and boys who herd the animals manage the water sources for the animals. Some of the men have told me that during the summer they must rotate the animals for water. There is much tension in the village when the animal water sources dry up.

#### by Claire Hilger, Christ the King Mission, Qacha's Nek, Lesotho

The chief is responsible for managing the water of the whole village. For the mission, the Mother Superior of the convent controls the water. The difference in the water supply for the mission (pumped by a generator through pipes) and the village (fetched from a protected spring) is striking. In families, women control the water as they are the ones fetching it. Most men have very little involvement in day to day running of the household. (Most able men work in the mines in South Africa or anywhere else they can find a job.) There is no field irrigation.

#### by Cynthia Holahan, Ha Nkoka, Thaba-Tseka District, Lesotho

The village has an elected committee responsible for paying maintenance fees to Rural Water Supply and monitoring the systems in the village. In the families it is the responsibility of the women and girls to supply the household with water.

Since there are no irrigation systems in Lesotho the farmers can do little with regards to their fields. Some do have water collection tanks to collect rainwater for their garden and domestic uses, however, this also the responsibility of the women.

#### by Becki Krieg, Qacha's Nek, Lesotho

Collecting water is usually the responsibility of the children in the family. Many girls will carry buckets of water on their heads. They have such good balance that they can walk one-two miles and not splash any of it! Boys will also collect water if they are not herding the animals. But they

don't carry the buckets on their heads. They will use a wheelbarrow. They will also sometimes give each other rides in the wheelbarrows for fun!

Using the water for cooking and washing is always the responsibility of the women and girls. On Saturdays the women and girls will gather at the river and help each other wash their clothes.

#### by Amy Bratsch, Ha Thamere-Qutin-Mt. Moorosi, Lesotho

I am told the water for my village is managed by a village committee. All residents are treated alike in the getting of water from the village tap. Each family regulates itself. We do not have farms in this area. Residents have small fields of maize for their own use. The people wait for rain before they begin to plant their maize fields and gardens.

#### by JeanMarie Mitchell, Ha Tebelo, Lesotho

There is a village water committee. They are in charge of the well and someone holds a key to our village well—she opens and closes it (locks it) daily. It is important to lock it up because at night everyone would steal it. In families Bo'Me (women) fetch water, sometimes children do too. Men hardly ever get water.

#### Conservation

#### by MaryAnn Camp, Ha Rantubu, Lesotho

I feel my community is not totally aware of water saving techniques and it is one of my education points during garden classes. Most serious gardeners have water catchment barrels. A lot of gardeners and farmers have dug pits or dams to collect water when it rains. In 15 months I have marked my calendar with 10 days of rain, so I have never seen the pits full. I have seen the water barrels full. Some villages didn't realize you could recycle bathing water or wash water. It is poured into water catchment basins that go underground and are not accessible via pumps. I encourage any kind of recycling of water.

#### by Claire Hilger, Christ the King Mission, Qacha's Nek, Lesotho

Water is conserved in water storage tanks placed at the end of every rain gutter on the mission. Water used for washing is often used again to water plants.

#### by Cynthia Holahan, Ha Nkoka, Thaba-Tseka District, Lesotho

There is no conservation of water in my village of Ha Nkokana except that the villagers know that the less water they use means fewer trips to the tap.

#### by Becki Krieg, Qacha's Nek, Lesotho

I don't see the people of Lesotho conserving water; it's more like they use it efficiently. As I have explained, it isn't easy to carry large buckets of water, and they often have to carry them long distances, so people only want to collect water once every day or so.

As a matter of fact, Lesotho is selling its water to the country of South Africa. You can learn more about this by reading about the Lesotho Highlands Water Project.

#### by Amy Bratsch, Ha Thamere-Qutin-Mt. Moorosi, Lesotho

Since we have so little water most of the year, people automatically conserve and recycle water. There is no official plan that is followed.

#### by JeanMarie Mitchell, Ha Tebelo, Lesotho

Many people in HaTebelo have rainwater catchments and use that for washing clothes.

### The Environment and Agriculture

#### by Peter Yurich, Ha Khayensti, Lesotho

In my area there does not seem to be any major changes. The water taps from the spring boxes on the mountain has brought the water to the villages and it is easier to get. If the taps are not working, then getting water is a problem because of the distance one has to carry it. The animals are taken to the river to drink. But right now the river has very little water.

#### by MaryAnn Camp, Ha Rantubu, Lesotho

I have not been aware of any technological advancements in my local village. In my previous village my tutor told me of times before the wells were installed--10 years ago. They had to walk five miles to a small pond that had an inlet and outlet but was usually covered with scum. She said they scraped off the scum, dug down into the sand, and waited for clean water to come through. The installing of pumps certainly relieved much work and the health improved in the village of Ha Ralintsi. There were reported deaths of typhoid which spurred the Health Department to install these new pumps.

One of my Peace Corps colleagues has reported to me that she is getting funding for a solar pump in her village.

#### by Claire Hilger, Christ the King Mission, Qacha's Nek, Lesotho

Protecting springs and providing taps has drastically improved the quality of water. But this is only true for villages near to the road. Remote villages still collect their water from unprotected springs or streams where cattle are likely to cross or humans even. This advancement tends to help the already advanced few like the sisters on the mission. The poorest most remote villages have the worst water supply. It should be noted that water quality is generally better in Lesotho than most African countries as it is too cold for tropical diseases to be prevalent. Giardia, a one-celled protozoa that causes diarrhea, is present in the water.

#### by Cynthia Holahan, Ha Nkoka, Thaba-Tseka District, Lesotho

I guess the advancement of new technology has helped to improve the quality of water in my village. I have been told that before the present water system was installed people collected water from natural springs that were often very dirty, slow and unreliable. People often walked over two kilometers to find a full spring. If no spring had water, they would use water form the river that often caused people to become sick, especially during the dry season.

#### by Becki Krieg, Qacha's Nek, Lesotho

The farmers in Lesotho depend entirely on natural rain for their crops to grow. In my village there is one farmer who received foreign aid to set up some irrigation pipes. He is very lucky. However, he is only one farmer out of many in this country who have no irrigation. Also, his farmland is very small.

To add to his difficulties, he has very little money to maintain his new irrigation system. If anything breaks, he does not have the money to repair it now. Then he too will depend on nature like everyone else.

Foreign aid is readily available in Lesotho. However, there is usually no plan for the maintenance of the new technology foreign countries install. Either the money is not available for repairs or there is no skilled person to do the work. Also it is difficult to get the parts that are needed to repair equipment

#### by Amy Bratsch, Ha Thamere-Qutin-Mt.Moorosi, Lesotho

The quality of water has not changed since I have lived here. The big advancement was the placement of another water tap. However, both taps are regulated the same and provide water on the same day at the same time. The big improvement was in the length of lines of people waiting to get water.

#### by JeanMarie Mitchell, Ha Tebelo, Lesotho

In Lesotho soil erosion is a major problem in the environment. Only 12% of the land here is arable, but farming exists everywhere. Grazing animals is another huge problem as well. Cattle just roam the lands going anywhere and everywhere. With the mountainous terrain and heavy winds and when there is rain, the soil is just all washed away down into deep rifts. They are everywhere and so much water just washes down them with good topsoil. Maybe in some places there is a dam to catch water into a pool, but they are few and far-between. The one near my village has been dry since April. The water comes down from the main springs. Most of the time it is good, but after a heavy rain, it is brown and very unclean. Rural Water Supply is a part of the Water Affairs Department that is responsible for supplying/ensuring villages in rural areas have potable water. However, there is a one per district and once your village applies for a well or tap it may take five years to receive it.

## Health and Nutrition

by Peter Yurich, Ha Khayensti, Lesotho

The water from the spring box is fine, but water from the water hole it is contaminated by the animals. People generally drink tea and home brew.

#### by MaryAnn Camp, Ha Rantubu, Lesotho

In some of my previous answers I have summarized some of the health problems. My water is fresh every two days. I worked at a clinic at my first village and I saw several dehydrated infants come to the clinic. Many mothers were young and first time mothers. We had to instruct them on how to make the oral rehydration formula and emphasize the importance of using boiled water and not just well water for their children when making the formula.

I doubt that the water in my present village has been tested. I am in the process of doing that for two reasons:

- 1. health reasons
- 2. fluoridation.

I'm doing an oral health clinic soon in my village and the dentist in Maseru has informed me that many areas in Lesotho have too much fluoride. If it tests positive for too much chlorine, I'd definitely encourage no fluoride toothpaste and also for the oral health clinic not to use fluoride toothpaste.

#### by Claire Hilger, Christ the King Mission, Qacha's Nek, Lesotho

Yes, the drinking water is fresh; it comes straight from the spring to my house. The sisters pump the water each night. Some families draw their water at night to avoid the lines and because they know no cattle will be crossing upstream.

#### by Cynthia Holahan, Ha Nkoka, Thaba-Tseka District, Lesotho

For the most part I'd say the water is fresh. People do, however, get sick occasionally and claim it is because of the bugs in the water. As I said, I boil. There is nothing done that I am aware of, to ensure the quality of the drinking water. During the dry season, when the water is stagnant and at a temperature at which bacteria breed, people seem to expect to get diarrhea or stomach problems. They simply wait for the rains to come again.

#### by Becki Krieg, Qacha's Nek, Lesotho

Water in the United States is treated to add things we need and take out the things that could make us sick. Since I grew up in the United States, this is the kind of water my body is used to. But my water in Lesotho comes just as it is, nothing is added and nothing is taken out. Now the people of Lesotho grew up with this kind of water. Their bodies are used to it. Mine is not. What will not make a person in Lesotho sick will make me sick. So I boil all the water I use for drinking or cooking. Boiled water is much healthier, even for people in Lesotho. However, boiling water takes time, which uses a lot of fuel. Fuel, either gas or kerosene is not easily available to most people here. Plus, it is very expensive. So most people here will not waste their fuel to boil their water.

### by Amy Bratsch, Ha Thamere-Qutin-Mt. Moorosi, Lesotho

The water seems fresh and clean coming from the tap. The people of the village do not boil their water. They do not become ill from drinking fresh tap water. The people rinse their water buckets before filling them. Most containers have lids, and appear to be clean.

#### by JeanMarie Mitchell, Ha Tebelo, Lesotho

The drinking water in Ha Tabelo is as fresh as it can be! The well is enclosed with cement and is locked up every night. Only after a heavy rain it is dirty and you should boil it.

## Other Uses of Water

#### by Peter Yurich, Ha Khayensti, Lesotho

In my area water is hard to get, so there aren't any water games and people do not go swimming. Sometimes when the river has a lot of water there are a couple of men and boys who fish.

#### V. Other stories you would like to share:

One day I had to go to the next village to get some water. When I reached the tap at the village there were five or six small children, about 4 -- 7 years old, getting small buckets of water. Some had empty one liter oil bottles and they were putting their containers in a line in front of the tap. There was no pushing or trying to get first in line. They were very orderly and correct as to who would get the water. Of course they insisted that I should go ahead of the line, but I waited my turn and was fascinated by the children. As their containers were filled, they would put it on them on their heads and walk back to their village without spilling a drop.

#### by Claire Hilger, Christ the King Mission, Qacha's Nek, Lesotho

Some people know how to swim and will play in the river or even fish, but most are afraid of the water. Most games here involve stones, which are abundant, not water.

# Recreation

#### by MaryAnn Camp, Ha Rantubu, Lesotho

The only time I have seen children play in the water is after a rain along with the ducks, geese, and pigs. The children would mainly stomp their feet and splash water. There is a river near the village, but the children say they are afraid to play there because of crocodiles. I believe these are stories from elder siblings as I do see the older boys use the river for swimming.

#### by Cynthia Holahan, Ha Nkoka, Thaba-Tseka District, Lesotho

During the rainy season when the river is flowing, the children 'thelelisa,' which means slide on the mossy rocks until they splash into the pool of water. It is a great sight to see. The Basotho claim to fear water and swimming because they believe snakes dwell in bodies of water. However, when the river is flowing there is nothing to fear so the children play and swim freely.

#### by Becki Krieg, Qacha's Nek, Lesotho

Lesotho is full of rivers and streams. Some are wide and some are quite small. But wherever the water is deep enough, you are sure to find some children playing on a hot summer's day. You can always find a group of heard boys playing in the river, taking a break from the hot loneliness on the mountainside. You can even find children fishing for trout in the rivers to sell or eat themselves

#### by Amy Bratsch, Ha Thamere-Qutin-Mt. Moorosi, Lesotho

During the rainy season I have seen children playing and swimming in the streams. Like children the world over, they play in any waterhole or puddle they can find. There are no organized water sports.

#### by JeanMarie Mitchell, Ha Tebelo, Lesotho

The most that children in HaTabelo 'play' with water is when they wash their plates for lunch.

# **Transportation**

by MaryAnn Camp, Ha Rantubu, Lesotho

The river, Caledon, is used mainly as a dividing marker between Lesotho and South Africa. I have never seen a craft of any kind on this river.

#### by Claire Hilger, Christ the King Mission, Qacha's Nek, Lesotho

I live at the edge of a plateau on the Senqu River gorge. The nearest bridge to cross the river is a three-hour drive. When the river is low enough people cross it on foot. Most of the time, though, they take a 'skate' or small rowboat across. Most of the rowers are paid by the government, but they will often demand money from those who do now know better. Stores and the hospital on the other side of the river have to have at least two vehicles. During the rainy season, they pick up supplies from South Africa, drive it to the river and park it. They then unload all their supplies into the waiting boat. After several trips across, they load it all into the other vehicle waiting on the other side and head off into the mountains. This is why only a few wealthy men own shops on the other side of the Senqu River.

#### by Cynthia Holahan, Ha Nkoka, Thaba-Tseka District, Lesotho

The river is not used by the local people for travel or transport.

#### by Becki Krieg, Qacha's Nek, Lesotho

Lesotho is full of rivers and streams. The roads used throughout the country cross these same rivers. Most of the roads are dirt roads, and there are few bridges along them to cross these rivers and streams. Therefore, the rivers are seen as a hindrance to transportation. During the rainy season, some areas become inaccessible because vehicles cannot cross the rivers.

Near my village there are several areas where the river is always too high to be crossed with a vehicle. There are boats at these places to carry people across the river to vehicles waiting on the other side.

#### by JeanMarie Mitchell, Ha Tebelo, Lesotho

I live about two and a half-hours walk from a small river--the Makhaleng River. It is not used for anything--not for transport or travel. I think its even dry most of the time. Other than that river, I basically live in the desert of Lesotho in the Mafeteng District.

# **Other Stories**

#### by MaryAnn Camp, Ha Rantubu, Lesotho

My use of water in the US is as conservative as in Lesotho. I live on a rural piece of property with a well. My well invariably goes dry every summer. I use a sump pump from a stream to water my garden thus not using well water. I had a septic tank replaced just before entering the PC that cost \$22,000, so I'm very aware of water and the cost of using water. Bathing in a basin in Lesotho has its advantages as well as at a pit latrine!

An unrelated story as a PCV in Lesotho has to deal with the tremendous cost of lives due to AIDS! Near my village is an orphanage with 300 children living there--most of them orphaned because their parents have died of AIDS. There is a funeral every weekend (sometimes 2). In my small village, youth who are 24, 26, 28, and 31 years of age are dying, and no one will admit it is AIDS and the denial goes on. Last week I stood at the graveside of one of the women in my sewing class. Mary was 34. Her 2 year old and 6 year old were at the graveside. I shall never forget the father helping his 2 sons with the shovels full of dirt as it is the custom for the family members to put the 1st dirt into the grave. I didn't have to be a Mosotho to feel pain--it permeates everyone. AIDS is the silent killer leaving many children behind. What can we do? You--and Me?

#### by Becki Krieg, Qacha's Nek, Lesotho

I joined the Peace Corps for many reasons. One of those reasons was to help people with resources they didn't have themselves such as qualified teachers. However, after two years in Lesotho, I realize that the people of Lesotho have given me so much more than I have given them.

The people of Lesotho, called Basotho, are a very kind and sharing people. Many of them have so little but they are willing to give it up for me, a stranger to their villages. Here is just on example:

Once I was travelling with some friends. We had to stop for the night in an unfamiliar village. The people of the village had very little. They use kerosene for cooking and heating. Yet there had been no kerosene in the village for a long time. But when we arrived they gave up their last liter of kerosene so that we could cook. The chief of the village also cancelled a trip so she could stay and be sure we were comfortable and safe.

It felt as if all I had given the Basotho in my two years had been repaid on that one simple act at a time when I needed it most. In the U.S. we live in a fast paced world. We are so busy that we tend to forget those around us. You don't have to give up your last liter of kerosene. But we can all learn a lesson from those kind and sharing Basotho. Help those around you. You never know when you will need help in return.

## by Amy Bratsch, Ha Thamere-Qutin-Mt.Moorosi, Lesotho

Now I limit my entire water usage to one bucket of water every other day or even every four days. It has given me a new view on how precious water really is. I hope this experience will have an effect on how I use water in the future, especially when I return to the U.S. and live in a house with all the modern conveniences.

# Peace Corps Volunteers in Lesotho Report The Source of Their Water and Their Daily Water Usage

#### Claire Hilger (1999)

Christ the King Mission Qacha's Nek, Lesotho

My water is pumped from a spring by a generator on the mission and comes through pipes right to a regular sink in my house. The water quality is very good. I do not need to filter it or boil it. I have never run out of water, but my students often do. The taps and toilets in their hostel have been turned off as they were told they were wasting it. So, instead, they draw it from rain collection tanks. When this runs out they usually fetch from the nearby village spring. The villagers beat them away with sticks, though. After a while the sisters will usually see reason and allow one teacher to pump water for them to the school and they collect it there. All of the water on the mission usually runs out in a few months at exam time, just when the rainy season is due to begin. It doesn't look like the supply will hold out this year. Water is everywhere unevenly distributed in this country. If a village tries to go to another village where the water is more plentiful they will often be chased away.

I use a lot less water here than I did in the U.S. I bathe everyday and this usually amounts to 2-3 liters of water. I use water for cooking, washing and tea, but in much smaller amounts than before. Usually a liter or less of water can wash the whole day's dishes. I have a flush toilet, but usually use wash water to flush it and follow the creed—"if its yellow, let it mellow." Water is used for the same purpose in the community, but sometimes in smaller amounts, as they have to fetch it on their heads.

#### Cynthia Holahan (1999)

Ha Nkoka, Thaba-Tseka District, Lesotho

The water source in my village is a public tap, actually a series of taps located throughout the village. The system is fairly new, installed by Rural Water Supply in 1996. The system is a series of underground and over ground pipes that pump water from a spring near the top of one of the village's mountaintops. I have to say I am quite lucky compared to the other volunteers. Water has never been a problem. The tap nearest my house did dry out for a few days during the dry season, but villagers were able to collect water from another tap less than a kilometer away. In general, the water system seems to be quite good. I have spoken to people of neighboring villages who have yet to install a water system and they are having many water troubles. Their sources are slow and unreliable boreholes that are dirty--used as drinking water by cows and goats. I consider myself a blessed Peace Corps Volunteer for having such a reliable water source.

On average, I fill a twenty-liter bucket of water every two to three days for daily use. This varies, of course, according to how often I bathe and wash my hair. In the evenings I boil about two liters for the next day's drinking. I began boiling after a long bout of giardiasis, an infection of the small intestine. At first I found it tedious and "un-Peace Corps-like" to boil, but having a routine of boiling to get rid of giardia is actually not a problem at all. I bathe indoors using a basin. It's truly amazing how little water is actually required to bathe! I use roughly three liters to bathe and three to wash my hair. During the dry season, when the river is nothing more than a series of stagnant puddles, I also use tap water to wash my clothes, as do others in the village.

Water: From Neglect to Respect Peace Corps World Wise Schools

# Peace Corps Volunteers in Lesotho Report The Source of Their Water and Their Daily Water Usage

The Basotho are very particular about washing themselves, their clothes, bedding and dishes on a daily basis so their dependence on the village water system, particularly during the dry season, is great. I don't even know how I can compare my use of water in Peace Corps to that in the United States. My life here depends on the availability of water, rain, and the weather in general as it never did growing up in a big city. I am completely conscious now of how every drop is used, of how to use water more efficiently, and of the fact that I never know when or if water will not be available.

Becki Krieg (1999)

Qacha's Nek, Lesotho

Most drinking water comes from one of three sources: a tap or pump, a natural spring, or collected rainwater. Except for the rainwater, the water has to be transported from the source to the people's houses. This is not an easy task. Water is heavy and people must walk 1-2 miles on rocky mountainous paths. Many villages have a water source within a 30-minute walk. Taps are the best. Just turn the handle and water pours! The pumps take more effort. Some are long levers that look like one-sided teeter-totters. Children will bounce them up and down with their whole bodies. Some are two handles that need to be turned like the pedals on a bicycle. And still others need to be cranked in circles horizontally. But even taps or pumps are no guarantee of water. Sometimes the water only flows for a few hours a day. Often early in the morning around 5:00 A.M. Villagers must wake up this early to get their buckets in line and wait for the water. Sometimes the taps dry completely and people must walk even further to another village or natural spring. (Remember how hard it is to carry water?) Natural springs are good but people need to scoop the water into buckets, which can take a long time. Rainwater is collected from most metal roofs, but the traditional houses have that ched roofs. And the dry season can last a long time, which makes collecting rainwater ineffective during that time. My water comes from all of these sources. I need to pay someone to collect my water from a tap or spring, whichever is available. I can't do it myself. It is too far to carry those heavy buckets and I haven't mastered carrying them on my head! If it rains, my host family collects rainwater from their metal roof. My house is next to theirs, but my roof is thatch.

My water comes from various sources, and sometimes the water from these different sources gets mixed together. So to be safe, I boil all water I use for drinking, especially my favorite drink, Kool-Aid sent from the States! There is no running water at my house. I store water in two large buckets inside my house. I need to scoop the water out of the buckets to use for cooking, cleaning or bathing. But Lesotho can be very cold. It even snows in the wintertime. So I certainly don't want to pour that cold water over myself for bathing. That means taking the extra time to heat some water before taking a bath. A bath means a few inches of water in a bucket. I certainly can't cover my whole body in hot water. Winter baths are cold! Because water is so difficult to get, I have learned to conserve and recycle water. I usually have only 60 liters of water for an entire week for all my needs. I can recycle water when washing clothes. The water used to rinse one load of laundry is used to wash the next load (all washed by hand of course). I have also

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earned how to get clean by bathing in a bucket	with only four liters of	water. That's only two 2-
iter Coke bottles of water for an entire bath!		

#### JeanMarie Mitchell (1999)

Ha Tebelo, Lesotho

The water in my village comes from a borehole or 'cilibeng.' When it is the rainy season (December-February) there is plenty of water. The rest of the year, however, is pure drought. The well has water only at 6:00 AM and sometimes at 5:00 PM. The villagers have to travel to neighboring villages to get water. I boil water for visitors because people have gotten diarrhea from it, however it does not seem to effect me. There are also many taps in my village.

My day begins with a knock at my door at dawn from a neighbor. She knocks to tell me to come to the well and fetch my water. Each night A'Me comes and takes my bucket to ensure I am the first to receive water. I have never valued something as much as I value water now. Honestly, I never thought twice about the water I used or how much or where I came from. Now, only receiving five liters a day, I save every drop I can! I recycle dirty water for use in my garden and my family also uses rainwater catchments. People here wait all day to get water and travel long distances to fetch it. The Rural Water Supply (government water works) has been promising for over a year now that it will come to my village and deep-drill a borehole, but they still have not arrived. Will they ever? I only hope.

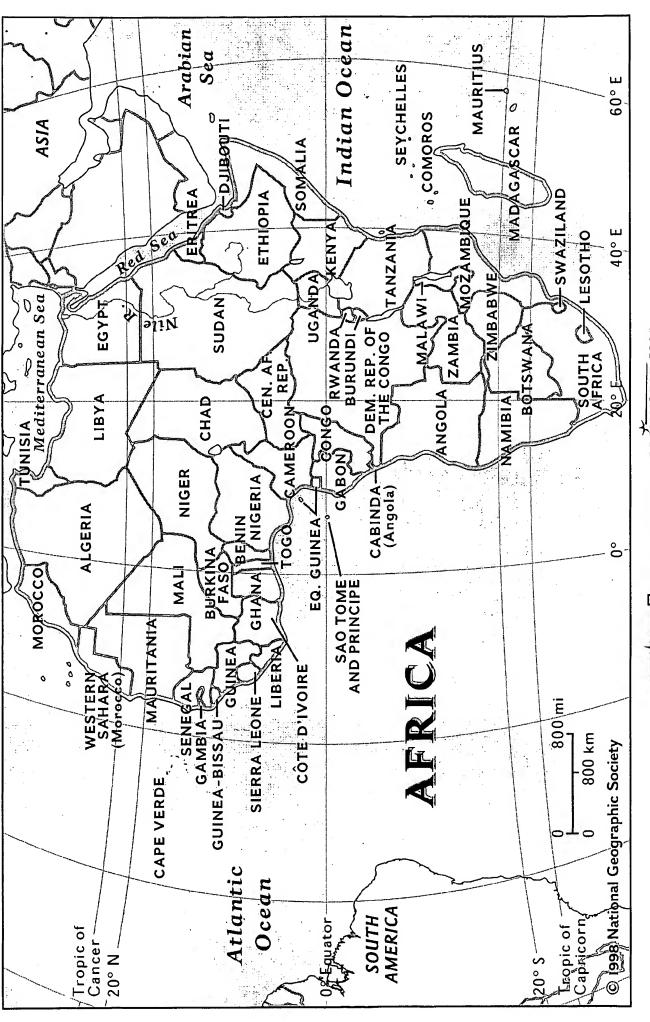
#### Peter Yurich (1999)

Ha Khayensti, Lesotho

My village, Ha Ntlale, gets its water from a tap that is fed from a spring box on the mountain. When there is no water at the tap, I must go to the next village or go to a water hole some distance away. I dip the water from the hole and carry it to my house. Often I find the cows, sheep, goats, or donkeys drinking at the water hole. Needless to say I boil all my water and always try to keep two buckets in reserve.

There isn't much water available because we had a very dry winter and no rain this spring. I usually try to use only one to one and a half liters of water a day. This includes bathing, cooking, and cleaning dishes. Once a week I wash clothes, but try to use as little water as possible. My day starts by boiling two liters of water. I use less than one liter to bath, drink two cups of coffee and save the rest for cooking and cleaning dishes. If the tap is working I may indulge myself by using a little more for bathing. My host family uses a little more than I do because there are more people in the family. They use a wheelbarrow to carry two 10-liter buckets of water. Right now they use more water because they are making dung smear for the floor and walls of a new building. The building was constructed from rock and held together with a mud mixture that dried and became hard.

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